CARBOHYDRATE RESEARCH VOL. 205 (1990)

AUTHOR INDEX

Aamlid, K. H., 446
Abbas, S. A., 385
Abdur Rahman, M., 422
Ali, M. H., 428
Altaf Hussain, S., 444
Ambrose, M. G., 377
Amess, R., 225
Awal, A., 173

Badel, A., 323
Baer, H. H., 247
Baggett, N., 225
Bajza, I., 435
Beard, A. R., 87
Beynon, L. M., 347
Bieg, T., c10
Boyd, A. S. F., 173
Brimacombe, J. S., 422
Brisson, J.-R., 133
Buchanan, J. G., 173
Butler, P. I., 87

Čadová, E., 161
Čapek, K., 161
Carpenter, T. A., 445
Carter, S. R., 181
Cenci di Bello, I., 269
Chittenden, G. J. F., 261
Clamp, J. R., 181
Collins, P. M., 428
Colquhoun, I. J., 53
Coxon, B., 377

Daniel, J. R., 45
Darby, P. R., 225
Defaye, J., 191
Desai, T., 105
Descotes, G., 323
Duce, S. L., 445
Dutton, G. G. S., 347, 361

Edgar, A. R., 173

Fatiadi, A. J., 377
Fellows, L. E., 269
Fernandez-Mayoralas, A., 105
Ferrier, R. J., 283
Fleet, G. W. J., 269
Fujii, K., 415

Gadelle, A., 191
Gan, L.-X., 45
Garegg, P. J., 125
Gigg, J., 105
Gigg, R., 105
Glushka, J. N., 305
Goode, A. R., 225
Gurjar, M. K., 398

Haines, A. H., 53, 406
Hall, L. D., 445
Horton, D., 71
Hounsell, E. F., 19

Ineyama, T., 415
Izawa, K., 415
Izquierdo Cubero, I., 293

Jacob, G. S., 269
Jacquinet, J.-C., 235
Jeanloz, R. W., 444
Jennings, H. J., 133
Jones, H. F., 53, 406

Kenne, L., 440
Khan, R., 211
Khan, S. H., 385
Kleeberg, M., 333
Köll, P., 1
Konowicz, P. A., 53, 406
Kopf, J., 1
Krogmann, C., 31

Lee, C.-K., 203
Lee, G., 446
Lehmann, J., 93
Lemieux, R. U., c12
Lindberg, B., 440
Lipták, A., 435

Mahbubur Rahman, M., 440
Malzahn, B., 1
Mann, J., 87
Matta, K. L., 385
McDonald, G., 422
Mentech, J., 323
Molyneux, R. J., 269
Mosihyzzaman, M., 440

Nakahara, Y., 147
Nash, R. J., 269
Nasir-ud-Din, 444

Ogawa, T., 147
Oscarson, S., 61
Oscarson, S., 125
Overend, W. G., 428

Pakulski, Z., 410
Parolis, H., 361
Parolis, L. A. S., 361
Partlett, N. K., 87
Paszkiewicz-Hnatiw, E., c12
Patel, G., 211
Paulsen, H., 31
Payne, D., 105
Pedersen, C., 191
Perlin, A. S., 305
Perry, M. B., 371
Plaza López-Espinosa, M. T., 293
Pozsgay, V., 133
Price, R. G., 446
Priebe, W., 71

Ramaiah Srinivas, N., 398
Ramsden, N. G., 269
Rathbone, E. B., 402
Regeling, H., 261
Richards, J. C., 347, 371
Richardson, A. C., 446
Ritzén, H., 61

Santoyo González, F., 247
Sedmera, P., 161
Sinaÿ, P., 235
Smith, B. V., 446
Spohr, U., c12
Stanley, S. M. R., 361
Stüz, A. E., 283
Suami, T., 415
Szeja, W., c10
Sznaidman, M., 71
Szönyi, M., 125
Szweda, R., c12

Thiem, J., 333

Vickers, E. E., 225

Walker-Nasir, E., 444
Whistler, R. L., 45
Williams, J. M., 181
Winchester, B., 269
Wotovic, A., 235
Wright, D. J., 19

Zamojski, A., 410
Zider, L., 93

CARBOHYDRATE RESEARCH VOL. 205 (1990)

SUBJECT INDEX

O-(2-Acetamido-2-deoxy-β-D-glucopyranosyl)-(1→2)-*O*-(4-*O*-methyl-α-D-mannopyranosyl)-(1→6)-β-D-glucopyranoside, 4-nitrophenyl, synthesis of, 385
N-Acetylglucosaminidase-V (ChT), synthesis of a potential specific acceptor-substrate for, 385
Acyloxonium ions in the high-yielding synthesis of oxolanes from alditols, hexoses, and hexonolactones catalysed by carboxylic acids in anhydrous hydrogen fluoride, 191
Amino acid-containing capsular polysaccharide from *E. coli* 08:K49:H21, structure of the, 347
2,7-Anhydro-L-*glycero*-β-D-*manno*-octulopyranose and its per-*O*-acetyl derivate, structural and conformational studies of, 377
1,5-Anhydro-2-deoxyhex-1-enitols (glycals), a study of the iodoalkoxylation of, 71
2,3′-Anhydrosucrose, synthesis of, 161
Assay of glycosidases, new colorimetric substrates for the, c5
Assignment of ^{13}C and ^{1}H resonances of the sucrose moiety and the ^{13}C resonances of the carbonyl carbons of sucrose octobenzoate, 53
Asymmetric induction in the catalytic osmylation of some α,β-unsaturated ocuronic acid derivatives, double, 422

Benzyl glycosides, regioselective hydrogenolysis of, c10
Binding sites in proteins, photolabile spacer-modified oligosaccharides for probing malto-oligosaccharide, 93
Bonnet monkey (*Macacca radiata*), neutral oligosaccharides of glycoproteins of the cervical mucus of, 444
Branched-chain, deoxynitro-1-thio-D-glucitol including a novel mode of 1-thioglycoside formation, synthetically useful transformations of a, 247

Capsular antigen from *Escherichia coli* 08:K87:H19, the structure of the, 361
Cervical mucus of the bonnet monkey, neutral oligosaccharides from the glycoproteins of, 444
Chlorodeoxy-L-talofuranoid derivatives, synthesis and reactions of, 203
Colorimetric substrates for the assay of glycosidases, new, c5
Comparison of the results of sequential hydrazinolysis–nitrosation and alkali-mediated cleavage–nitrosation of the *O*-linked oligosaccharides of gastric mucus glycoproteins, 181
Computer-assisted interpretation of ^{1}H-n.m.r. spectra in the analysis of the structure of oligosaccharides, 19
Conformational studies of 2,7-anhydro-L-*glycero*-β-D-*manno*-octulopyranose and its per-*O*-acetyl derivative, structural and, 377
Kdo-containing pentasaccharide as part of the core–lipid A component of lipopolysaccharides, synthesis of, 31
Core–lipid A component of lipopolysaccharides, synthesis of a Kdo-containing pentasaccharide as part of, 31
Cytidine, synthesis of 2′,3′-dideoxy-2′,3′-α-methano-, 87

Deacetylation of sucrose octa-acetate with primary amines to give 2,3,4,6,1′,6′-hexa-*O*-acetylsucrose, selective, 406
6-*O*-Decanoyl-3,4-di-*O*-isobutyrylsucrose and other fatty acid esters of sucrose, synthesis of, 41
Deoxyhexitols and derivates thereof, synthesis from D-glucono-1,5-lactone of some mono- and di-, 261
7-Deoxy-7-nitroheptitols, crystal structures of, 1
2′,3′-Dideoxy-2′,3′-α-methanocytidine, synthesis of, 87
2,3-Diamino-1-cyclohexanols, synthesis and resolution of, 415
Disaccharides related to heparin and heparan sulfate, formation by chemical modification of maltose, 305
Dodecagalacturonic acid (a phytoalexin elicitor of soybean), stereoselective total synthesis of, 147

Enantiomers of 6-epicastanospermine and 1,6-diepicastanospermine, synthesis from D- and L-gulonolactone, 269
Enantiospecific synthesis of (−)-talaromycins A and B from D-fructose, 293
Enzyme assays, synthesis of luciferin glycosides as substrates for novel ultrasensitive, 225
6-Epicastanospermine and 1,6-diepicastanospermine, synthesis from D- and L-gulonolactone of the enantiomers of, 269
Erythritol and ribitol, formation of isopropyli-

dene acetals of, under conditions of kinetic control, 173
Escherichia coli 08:K87:H19, the structure of the capsular antigen from, 361
Escherichia hermannii (ATCC 33651) lipopolysaccharide O-chain, identification as a D-rhamnan, 371
Exocyclic glycal, synthesis and reations of leucrose and its, 333

Formation of disaccharides related to heparin and heparan sulfate by chemical modification of maltose, 305
Formation of isopropylidene acetals of erythritol and ribitol under conditions of kinetic control, 173
N-Formylkanosamine glycosyl donor, synthesis of phenyl 4-(N-benzylformamido)-4,6-dideoxy-3-*C*-methyl-2-*O*-methyl-1-thio-α-L-mannopyranoside, 435
D-Fructose, an enantiospecific synthesis of (−)-talaromycins A and B from, 293
Fucofuranoside, a novel synthesis of methyl 2-*O*-methyl-α,β-L-, 398

O-β-D-Galactopyranosyl-(1→2)-*O*-α-D-xylopyranosyl-(1→6)-*O*-β-D-glucopyranosyl-(1→4)-β-D-glucopyranoside, a chemical synthesis of propyl, 235
Garegg–Samuelsson olefination reaction, new observation on the, 410
3-*O*-(α-D-glucopyranosyl)-7-*O*-(L-*glycero*-α-D-*manno*-heptopyranosyl)-L-*glycero*-D-*manno*-heptopyranoside, synthesis of methyl, 125
D-Glucono-1,5-lactone, synthesis of some monodeoxy- and dideoxy-hexitols and derivatives thereof from, 261
D-Glucose, halogenation reactions of derivatives of sucrose and, 211
Glycals, a study of the iodoalkoxylation of, 71
Glycoproteins of the cervical mucus of the bonnet monkey, characterization of the neutral oligosaccharides of, 444
Glycosidases, new colorimetric substrates for the assay of, C5

Halogenation reactions of derivatives of D-glucose and sucrose, 211
Heptitols, nitro-, crystal structures of, 1
Hexa-*O*-benzyl-5-hydroxy-pseudo-α-D-glucopyranose and its C-5 epimer, synthesis of, 283
Hydrazinolysis–nitrosation and alkali-mediated cleavage–nitrosation of the *O*-linked oligosaccharides of gastric mucus glycoproteins, a comparison of the results of sequential, 181
Hydrogen fluoride, acyloxonium ions in the high-yielding synthesis of oxolanes from alditols, hexoses, and hexonolactones catalysed by carboxylic acids in, 191
Hydrogenolysis of benzyl glycosides, regioselective, C10

Identification of sucrose acetates, n.m.r. method for the, 402
myo-Inositol, synthesis and resolution of (+)-1,5,6-tri-*O*-benzyl-, 105
Iodoalkoxylation of 1,5-anhydro-2-deoxyhex-1-enitols (glycals), a study of the, 71
Isopropylidene acetals of erythritol and ribitol, formation of, under conditions of kinetic control, 173

Leucrose and its exocyclic glycal, synthesis and reactions of, 333
Lewis b tetrasaccharide by a lectin and a monoclonal antibody, the effect of substituting key hydroxyl groups by amino groups on the binding of a, C12
Lipid A–core component of lipopolysaccharides, synthesis of a Kdo-containing pentasaccharide as part of, 31
Lipopolysaccharide O-chain of *Escherichia hermannii* (ATCC 33651), identification as a D-rhamnan, 371
Lipopolysaccharides, synthesis of a Kdo-containing pentasaccharide as part of the core–lipid A component of, 31
Luciferin glycosides as substrates for novel ultrasensitive enzyme assays, synthesis of, 225

Malto-oligosaccharide binding sites in proteins, photolabile spacer-modified oligosaccharides for probing, 93
Maltose, formation of disaccharides related to heparin and heparan sulfate by chemical modification of, 305
Methyl 3-*O*-(α-D-glucopyranosyl)-7-*O*-(L-*glycero*-α-D-*manno*-heptopyranosyl)-L-*glycero*-α-D-*manno*-heptopyranoside, synthesis of, 125
Methyl 2-*O*-methyl-α,β-L-fucofuranoside, a novel synthesis of, 398
Methylene transfer reactions on sugar esters, lactones, and uloses, titanium-mediated, 428
Monoclonal antibody, the effect of substituting key hydroxyl groups by amino groups on the binding of the Lewis b tetrasaccharide by a lectin and a, C12

Nitroheptitols, crystal structures of, 1
4-Nitrophenyl *O*-(2-acetamido-2-deoxy-β-D-glucopyranosyl)-(1→2)-*O*-(4-*O*-methyl-α-D-mannopyranosyl)-(1→6)-β-D-glucopyranoside, synthesis of, 385
N.m.r. imaging to map the spatial distribution of structure in polysaccharide gels, use of, C1
N.m.r. method for the identification of sucrose

acetates, 402
N.m.r. spectra in the analysis of the structure of oligosaccharides, computer-assisted interpretation of ^{1}H-, 19
Novel synthesis of methyl 2-*O*-methyl-α,β-L-fucofuranoside, 398

Observations on the Garegg–Samuelsson olefination reaction, new, 410
Octuronic acid derivatives, double asymmetric induction in the catalytic osmylation of some α,β-unsaturated, 422
Olefination reaction, new observations on the Garegg–Samuelsson, 410
Oligosaccharides, computer-assisted interpretation of ^{1}H-n.m.r. spectra in the analysis of the structure of, 19
Oligosaccharides of gastric mucus glycoproteins, a comparison of the results of sequential hydrazinolysis–nitrosation an alkali-mediated cleavage–nitrosation of the *O*-linked, 181
Osmylation of some α,β-unsaturated octuronic acid derivates, double asymmetric induction in the catalytic, 422
Oxidation of sucrose with sodium metaperiodate, 223

Periodate oxidation of sucrose, 323
Phenyl 4-(*N*-benzylformamido)-4,6-dideoxy-3-*C*-methyl-2-*O*-methyl-1-thio-α-L-mannopyranoside, an *N*-formylkanosamine glycosyl donor, synthesis of, 435
Polysaccharide from *E. coli* 08:K49:H21, structure of the amino acid-containing capsular, 347
Polysaccharide gels, use of n.m.r. imaging to map the spatial distribution of structure in, c1
Polysaccharide of type III Group B *Streptococcus*, synthesis of a tri- and a tetra-saccharide fragment of the capsular, 133
Polysaccharide of *Vibrio fluvialis* AA-18239, structural studies of the O-antigen, 440
Propyl *O*-β-D-galactopyranosyl-(1→2)-*O*-α-D-xylopyranosyl-(1→6)-*O*-β-D-glucopyranosyl-(1→4)-β-D-glycopyranoside, a chemical synthesis of, 235
Pseudo-α-D-glucopyranose, synthesis of hexa-*O*-benzyl-5-hydroxy-, and its C-5 epimer, 283

Regioselective hydrogenolysis of benzyl glycosides, c10
Resolution of 2,3-diamino-1-cyclohexanols, synthesis and, 415
Resolution of (±)-1,5,6-tri-*O*-benzyl-*myo*-inositol, synthesis and, 105
D-Rhamnan, identification of the lipopolysaccharide O-chain of *Escherichia hermannii* (ATCC 33651) as a, 371

Selective deacetylation of sucrose octa-acetate with primary amines to give 2,3,4,6,1′,6′-hexa-*O*-acetylsucrose, 406
Selective deacylation of sucrose octabenzoate, use of ^{13}C-n.m.r. spectroscopy for the study of the, 53
Spacer-modified oligosaccharides for probing malto-oligosaccharide binding sites in proteins, photolabile, 93
Stereoselective total synthesis of dodecagalacturonic acid, a phytoalexin elicitor of soybean, 147
Structural and conformational studies of 2,7-anhydro-L-*glycero*-β-D-*manno*-octulopyranose and its per-*O*-acetyl derivative, 377
Structural studies of the O-antigen polysaccharide of *Vibrio fluvialis* AA-18239, 440
Structure in polysaccharide gels, use of n.m.r. imaging to map the spatial distribution of, c1
Structure of the amino-containing capsular polysaccharide from *E. coli* 08:K49:H21, 347
Structure of the capsular antigen from *Escherichia coli* 08:K87:H19, 361
Substituting key hydroxyl groups by amino groups on the binding of Lewis b tetrasaccharide by a lectin and a monoclonal antibody, the effect of, c12
Sucrose acetates, n.m.r. method for the identification of, 402
Sucrose and D-fructose, synthesis of sweet-tasting methylthio derivatives of, 45
Sucrose, halogenation reactions of derivatives of D-glucose and, 211
Sucrose octa-acetate, selective deacetylation with primary amines, to give 2,3,4,6,1′,6′-hexa-*O*-acetylsucrose, 406
Sucrose actabenzoate: assignment of ^{13}C and ^{1}H resonances of the sucrose moiety and the ^{13}C resonances of the carbonyl carbons, 53
Sucrose, periodate oxidation of, 323
Sucrose, syntheses of four fatty acid esters of, found in a wild potato, 61
Sucrose, synthesis of 2,3′-anhydro-, 161
Sugar esters, lactones, and uloses, titanium-mediated methylene transfer reactions on, 428
Sweet-tasting methylthio derivatives of D-fructose and sucrose, synthesis of, 45
Synthesis of a tri- and a tetra-saccharide fragment of the capsular polysacchride of type III Group B *Streptococcus*, 133
Synthesis and reactions of chlorodeoxy-L-talofuranoid derivatives, 203
Synthesis and reactions of leucrose and its exocyclic glycal, 333
Synthesis and resolution of 2,3-diamino-1-cyclohexanols, 415
Synthesis of 2,3′-anhydrosucrose, 161

Synthesis of 2',3'-dideoxy-2',3'-α-methanocytidine, 87
Synthesis of dodecagalacturonic acid (a phytoalexin elicitor of soybean), stereoselective total, 147
Syntheses of four fatty acid esters of sucrose found in a wild potato, including the major component 6-*O*-decanoyl-3,4-di-*O*-isobutyrylsucrose, 61
Synthesis of luciferin glycosides as substrates for novel ultrasensitive enzyme asays, 225
Synthesis of methyl 3-*O*-(α-D-glucopyranosyl)-7-*O*-(L-*glycero*-α-D-*manno*-heptopyranosyl)-L-*glycero*-α-D-*manno*-heptopyranoside, 125
Synthesis of propyl *O*-β-D-galactopyranosyl-(1→2)-*O*-α-D-xylopryanosyl-(1→6)-*O*-β-D-glucopyranosyl-(1→4)-β-D-glucopyranoside, a chemical, 235
Synthesis of resolution of (±)-1,5,6-tri-*O*-benzyl-*myo*-inositol, 105
Synthesis of some monodeoxy- and dideoxy-hexitols, and derivatives thereof, from D-glucono-1,5-lactone, 261
Synthesis of oxolanes from alditols, hexoses, and hexonolactones catalysed by carboxylic acids in anhydrous hydrogen fluoride, acyloxonium ions in the high-yielding, 191
Synthesis of sweet-tasting methylthio derivatives of D-fructose and sucrose, 45
Synthesis of the enantiomers of 6-epicastanospermine and 1,6-diepicastanospermine from D- and L-gulonalactone, 269
Synthesis on phenyl 4-(*N*-benzylformamido)-4,6-dideoxy-3-*C*-methyl-2-*O*-methyl-1-thio-α-L-mannopyranoside, an *N*-formylkanosamine glycosyl donor, 435
Synthetically useful tranformations of a branched-chain, deoxynitro-1-thio-D-glucitol including a novel mode of 1-thioglycoside formation, 247

(−)-Talaromycins A and B, enantiospecific synthesis from D-fructose, 293
L-Talofuranoid derivatives, synthesis and reactions of chlorodeoxy-, 203
Thioglycoside formation, synthetically useful tranformations of a branched-chain, deoxynitro-1-thio-D-glucitol including a novel mode of 1-, 247
Titanium-mediated methylene transfer reactions on sugar esters, lactones und uloses, 428
Tri- and tetra-saccharide fragments of the capsular polysaccharide of type III Group B *Streptococcus*, synthesis of, 133

Vibrio fluvialis AA-18239, structural studies of the O-antigen polysaccharide of, 440